

# 2024 Missouri Student Survey



Susan Depue Bradford  
Ruth Peabody  
Liz Garrett



# TABLE OF CONTENTS

CHAPTER 1 – INTRODUCTION .....	6
Participants .....	6
Methods .....	6
CHAPTER 2 – ALCOHOL, TOBACCO, & OTHER DRUGS .....	8
Trends in Lifetime & Past Month Substance Use .....	8
Substance Use Comparisons with a National Sample .....	8
2024 Substance Use Comparison over Time .....	9
Types of Prescription Drugs Misused over Time .....	10
Age of First Substance Use over Time .....	11
Substance Use Extent & Circumstances .....	12
Tobacco .....	12
Alcohol .....	16
Marijuana .....	18
Prescription Drug Misuse .....	20
Factors Associated with Adolescent Substance Use .....	23
Substance Availability .....	23
Law Enforcement .....	23
Peer Substance Use and Perception of Substance Use .....	24
Perceived Risk of Harm from Substances .....	25
Morality of Substance Use .....	26
CHAPTER 3 – PROBLEM BEHAVIORS .....	27
Bullying .....	27
Bullying Behaviors .....	27
Peer Victimization .....	28
Physical Aggression & Experience with Weapons .....	28
Rebellious & Defiant Attitudes .....	29
Weapons - Availability, Law Enforcement, and Peer Behavior .....	29
CHAPTER 4 – MENTAL HEALTH .....	30
Depression .....	30
Self-Harm, Suicidal Ideation & Attempts .....	31
Resiliency .....	32
CHAPTER 5- EDUCATIONAL ENVIRONMENT .....	33

Perceptions & Attitudes toward School .....	33
School Performance.....	34
Appendix A – Survey Wording 2024 .....	35

# EXECUTIVE SUMMARY

In order to track trends in adolescent risk behaviors, the Missouri Department of Mental Health (DMH) and Department of Elementary and Secondary Education (DESE) have conducted the Missouri Student Survey (MSS) every even numbered year since 2000.

In 2024, a total of 96 schools (48 middle and 48 high) were selected to be part of the random sample. Of these, 33 (34%) schools with 2,826 students participated in the 2024 MSS. Gender, grade (middle school, high school), race/ethnicity, and school size category (small, medium, large) were weighted to reflect statewide demographics. All data in this report are from the random sample.

In both Missouri and the United States, alcohol lifetime use was higher than all other drugs, followed by both forms of cigarette and marijuana use. Continuing the trend from 2020, marijuana was more frequently reported as lifetime use than standard cigarettes, reflecting a decrease in standard cigarette use. Lifetime use of alcohol was lower than national rates, although past month was equal. Lifetime and past month use of marijuana is lower than the national average. Use of standard cigarettes remain higher than the national level.

The majority of the substances show a downward trend, although alcohol has only a single data point at the lower rate, which may be an outlier. Marijuana remains steady. Hookah, over the counter drugs, inhalants and synthetic drugs have shown a small uptick, although the numbers remain relatively low. Marijuana, cigarettes and alcohol are decreasing age of first use over time (this is the undesirable direction).

Among students who reported that they smoked standard cigarettes, most (57.1%) smoked only one or two days out of the month, followed by 3 to 5 days (20.1%), and then daily smoking (11.4%). Of those who used of chewing tobacco in the past 30 days, the largest percentage of youth used chewing tobacco 1 or 2 days (62.6%) a month or 20 to 29 days (18.9%). The majority of students who reported using a hookah only did it on an occasional basis. However, about 1 in 15 reported using daily. Youth who reported using vapes have a similar use pattern to the previous pattern standard cigarettes. The most students (34.1%) smoked only one or two days out of the month, followed by daily smoking (28.3%). Vapes have become the most common way youth ingest nicotine. However, many youth will use more than one method. For those who report using a vape in the past 30 days, 17.5% have also smoked a standard cigarette in the past month, 4.6% have used chewing tobacco and 13.5% have used a hookah.

Of the students who reported having had at least one drink in their lifetime, about one-third (31.0%) only consumed alcohol on 1-2 occasions. While approximately 10% had consumed alcohol 40 or more times, this continues a decrease from 2020. This excludes “when you only had a sip or two from a drink or if you drank alcohol only for religious purposes”.

Of youth who smoked marijuana in the past month, almost a third (31.3%) youth reported smoking one or two days in the past month, while a fourth (24.4%) reported daily use.

Of youth who misused prescription drugs in the past month, the majority reported only using 1-2 days, while no one reported daily use.

About half of youth perceived vapes, alcohol, and over-the-counter drugs as either “very easy” or “sort of easy” to obtain. Marijuana was considered easier to get than prescription or synthetic drugs, with almost one third of students believing marijuana was easy to get. Illegal drugs were perceived as the most difficult to get, with a large majority (91.5%) reporting that they were “sort of hard” or “very hard” to get.

The majority of students felt like their friends would consider all types of substance use wrong. While vapes was the least likely for students to be concerned about peer judgment, three out of four still thought their friends would disapprove. Similarly, while students may have friends who used substances, the great majority of them believed that their friends would not see them as “very cool” or “pretty cool” if they used. Standard cigarettes were seen as the least cool substance.

Alcohol usage (without a specified dosage) and marijuana were seen as the least risky substances. As alcohol dosage was specified, however, it was seen as more risky. Cigarettes, prescription drug misuse, and other illegal drug use was perceived as the most risky.

The majority of students reported that they had not engaged in physical bullying (86.6%), spread mean rumors or lies at school (81.9%), or embarrassed another student online or via text messaging (83.0%). However, approximately half (54.8%) of the youth did report making fun of other people and 4.8% reported doing this 40 or more times in the past three months.

Youth were asked six questions related to depression. Most students (72.3%) reported feeling grouchy or in a bad mood at least “sometimes”. Over half reported feeling sad (55.8%), changes in sleep (59.2%), or difficulty concentrating in school (61.9%) at least “sometimes”. Feeling hopeless was reported the least (34.7% “sometimes”, “often” or “always”). This pattern has remained consistent over time. Females consistently reported a statistically significant difference in experiencing more depressive symptoms than males.

About 21.5% of students reported attempting to harm themselves in a deliberate, but not suicidal way. The most common method of self-harm was “cut, scratched, or hit myself on purpose”. Females were much more likely than males to report self-harm.

More than one in ten youth (11.2%) surveyed reported that they considered suicide in the last year and 7.8% made a plan to attempt suicide. Of those who attempted suicide, 18.5% had attempts that resulted in injury. The majority of those who attempted did so only once (53.2%).

While almost half didn’t feel like they had healthy coping mechanisms, the majority of students “agreed” or “strongly agreed” with the questions about knowing where to get help, feeling optimistic, and handling stress well.

# CHAPTER 1 – INTRODUCTION



In order to track trends in adolescent risk behaviors the Missouri Department of Mental Health (DMH) and Department of Elementary and Secondary Education (DESE) have conducted the Missouri Student Survey (MSS) every even numbered year since 2000. The first MSS, conducted by Research Triangle Institute on behalf of the DMH, was funded by the U.S. Department of Health and Human Service's Substance Abuse and Mental Health Services Administration (SAMHSA). Since then, the MSS has been funded by the DMH and analysis conducted by the Missouri Institute of Mental Health (MIMH). Beginning in 2016, MIMH coordinated the data collection as well. All public middle and high schools are asked to participate by surveying at least one classroom per grade. Beginning in 2018, private schools were also allowed to opt in, although participation from this group is low. This report describes the results of this survey.

The 2024 survey involves two levels of sampling. A random sample, selected for equal geographical distribution, was used to estimate prevalence rates for the entire state. A convenience sample was used to determine the county level data. Students who were part of the random sample were also automatically included in the convenience sample.

## **Participants**

**Statewide Random Sample:** A total of 96 schools (48 middle and 48 high) were selected to be part of the random sample. Of these, 33 (34%) schools with 2,826 students participated in the 2024 MSS. Gender, grade (middle school, high school), race/ethnicity, and school size category (small, medium, large) were weighted to reflect statewide demographics. All data in this report are from the random sample.

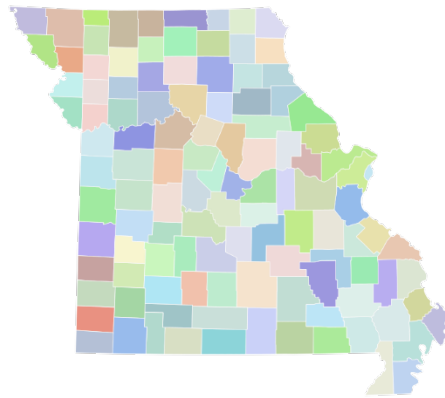
**County Level Convenience Sample (not included in this report):** The 2024 MSS was administered to students in grades 6-12. After data cleaning the sample size equaled 92,449 representing 93 counties (81%). Convenience samples were used in all MSS reports prior to 2016.

## **Methods**

Presented in this report are the results of the 2024 MSS, which assesses substance use and other health-risk behaviors among 6<sup>th</sup> through 12<sup>th</sup> graders attending public schools across the state. The numbers in this report reflect a random sample at the state level. Data were weighted to more accurately reflect the population demographics (See Appendix B).

Given the extremely large sample size of the weighted dataset, statistical analysis proved challenging. The statistical power of this dataset was so large that even the most minuscule change was regarded as

statically significant even though it may not be a meaningful difference. When this occurs, confidence intervals (CIs) are typically referred to instead; however, the weighting protocol used produces that CIs are very tight which means that this method also cannot be used. Given this, trends will be discussed, but there was some subjectivity in determining how much of a difference was “meaningful”.



Data in this report are  
drawn from the Statewide  
Random Sample. To  
obtain County-Level data,  
see  
<https://seow.dmh.mo.gov>

# CHAPTER 2 – ALCOHOL, TOBACCO, & OTHER DRUGS






## Trends in Lifetime & Past Month Substance Use

### Substance Use Comparisons with a National Sample

In both Missouri and the United States, alcohol lifetime use was higher than all other drugs, followed by both forms of cigarette and marijuana use. Continuing the trend from 2020, marijuana was more frequently reported as lifetime use than standard cigarettes, reflecting a decrease in standard cigarette use. Lifetime use of alcohol was lower than national rates, although past month was equal. Lifetime and past month use of marijuana is lower than the national average. Use of standard cigarettes remain higher than the national level.

National data were taken from the National Survey on Drug Use and Health for youth age 12-17 years (NSDUH, 2021-22, \*2021). Some substances are blank because the survey does not collect this data.

Percentage of Substance Use in Missouri Users (6-12<sup>th</sup> grade) and the United States Users (12-17 years)

	Missouri (MSS)		United States (NSDUH)	
	Lifetime	30-day	Lifetime	30-day
Alcohol 	19.9	6.8	22.3	6.8
Vapes 	18.0	9.1	-	6.9
Marijuana 	12.7	7.3	13.5	11.5
Cigarettes 	7.4	2.0	6.9*	1.2
Over-the-Counter Meds	3.5	1.7	-	0.6
Prescription Drugs 	3.3	1.6	-	-
Hookah	2.9	1.4	-	-
Inhalants	2.4	1.2	7.5	2.2
Synthetic Drugs	1.9	1.0	-	-
Hallucinogens	1.9	-	2.1	1.4
Chewing Tobacco	1.6	0.5	-	-
Cocaine	0.5	-	0.3	0.2
Club Drugs	0.6	-	-	-
Methamphetamine	0.3	-	0.1	0.1
Heroin	0.2	-	<.05	<.05

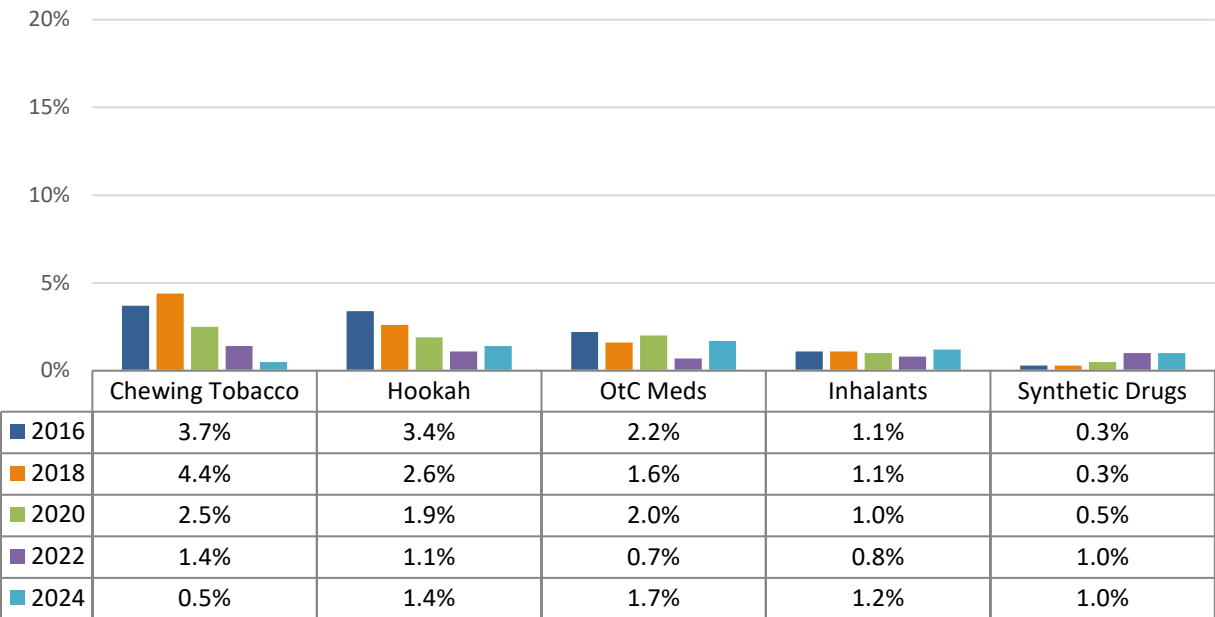
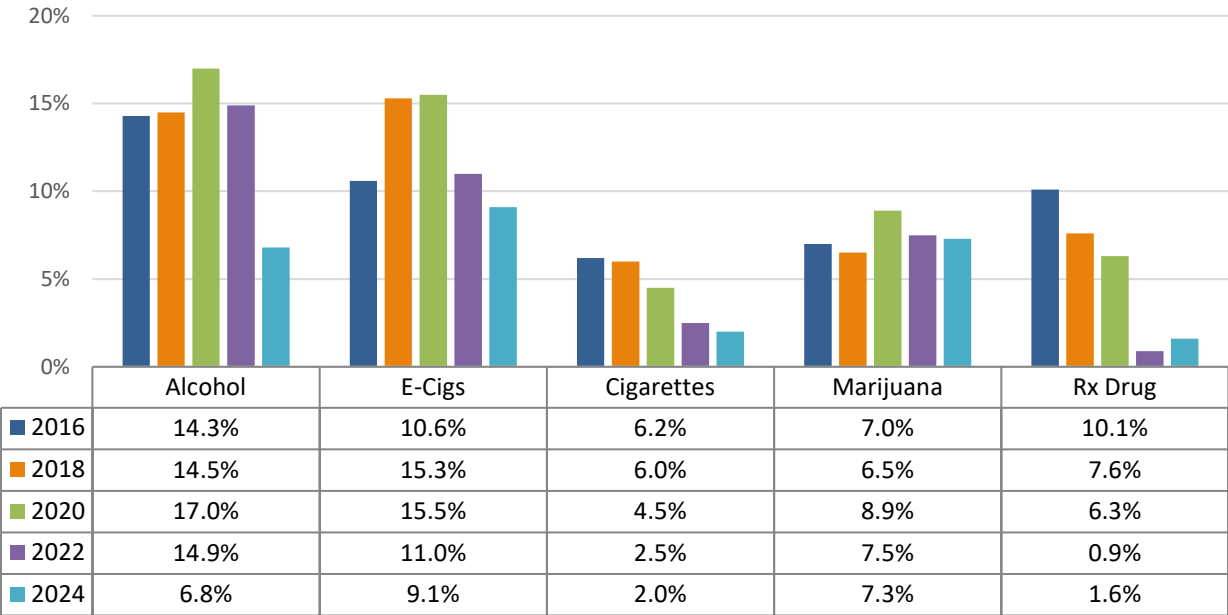


# 2024 Substance Use Comparison over Time

The MSS statewide random sample has data for five time points (2016 to 2024). Comparisons can be made over time and provide information on trends.

The majority of the substances show a downward trend, although alcohol has only a single data point at the lower rate, which may be an outlier. Marijuana remains steady. Hookah, over the counter drugs, inhalants and synthetic drugs have shown a small uptick, although the numbers remain relatively low.

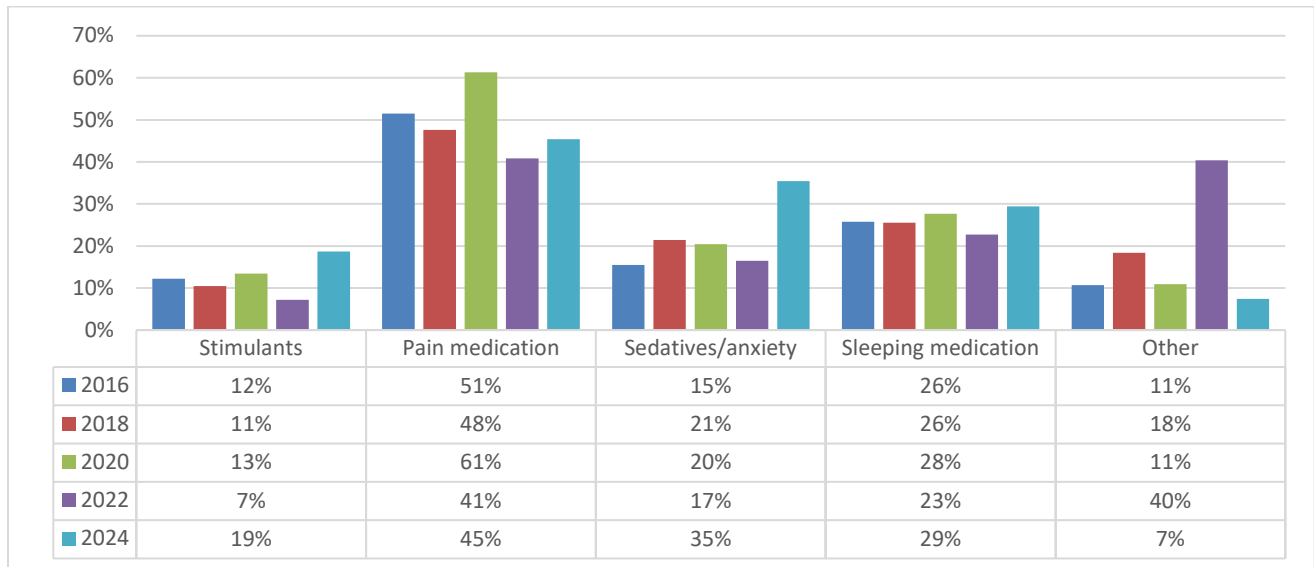
Past Month Substance Use, MSS 2016 - 2024



## Types of Prescription Drugs Misused over Time

Across all categories (excluding “other”), use is up in 2024. This may be a sign of more use but also may be that students who previously picked “other” now understand the categories well enough to correctly label what they are using.

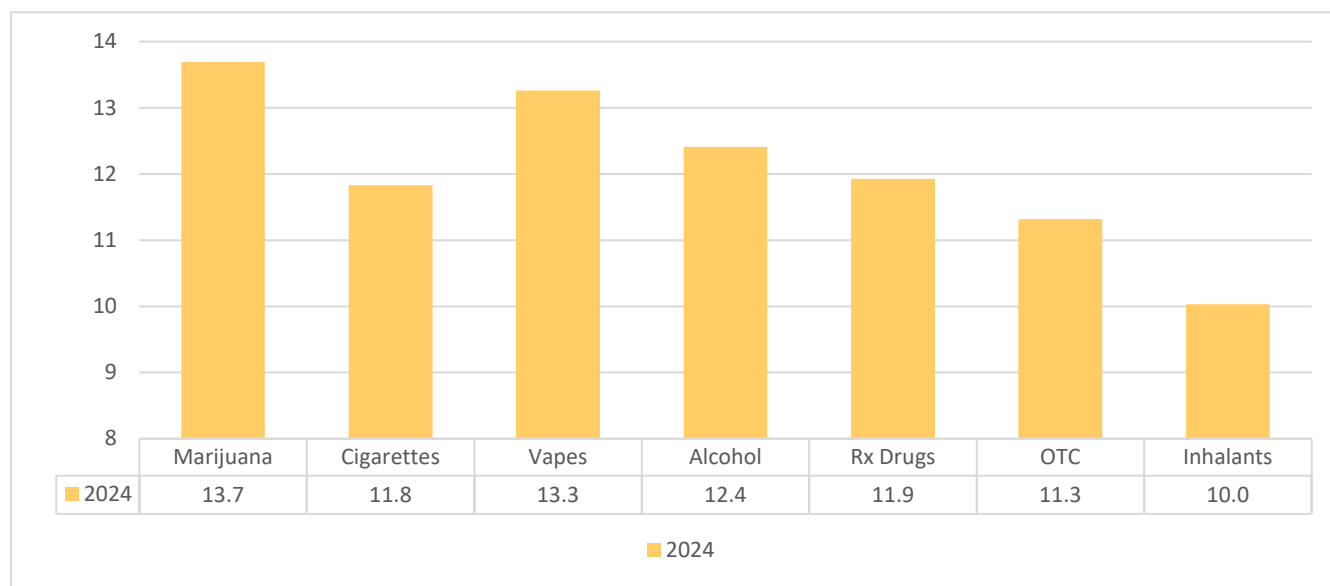
Types of Prescription Drugs Misused, MSS 2016 - 2024



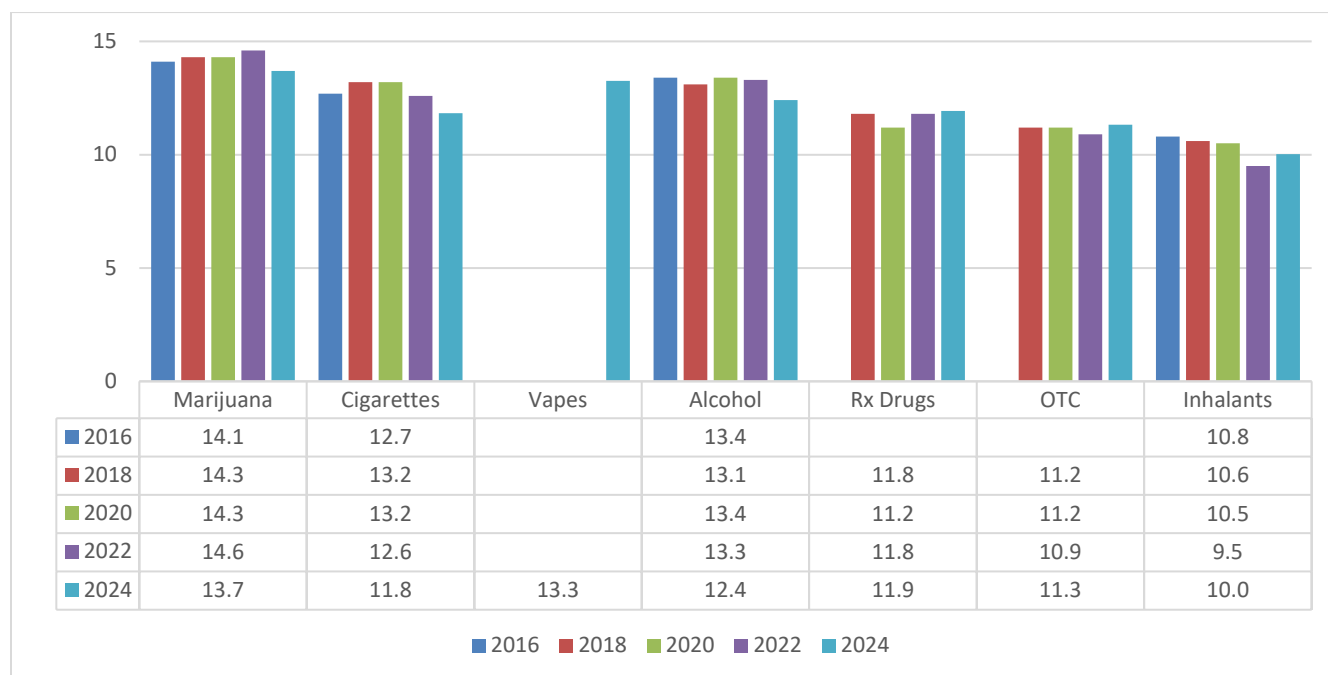
## Age of First Substance Use over Time

Looking at a zoomed in view (notice the scale change), students start inhalants at the youngest age while marijuana and vapes are the two substances that are started over the age of 13.

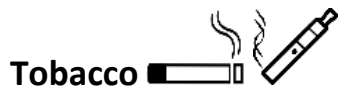
Average Age of First Use, MSS 2018 - 2024



Looking at use over time, marijuana, cigarettes and alcohol are decreasing age of first use over time. Others are remaining stable. Vaping was asked for the first time in 2024.

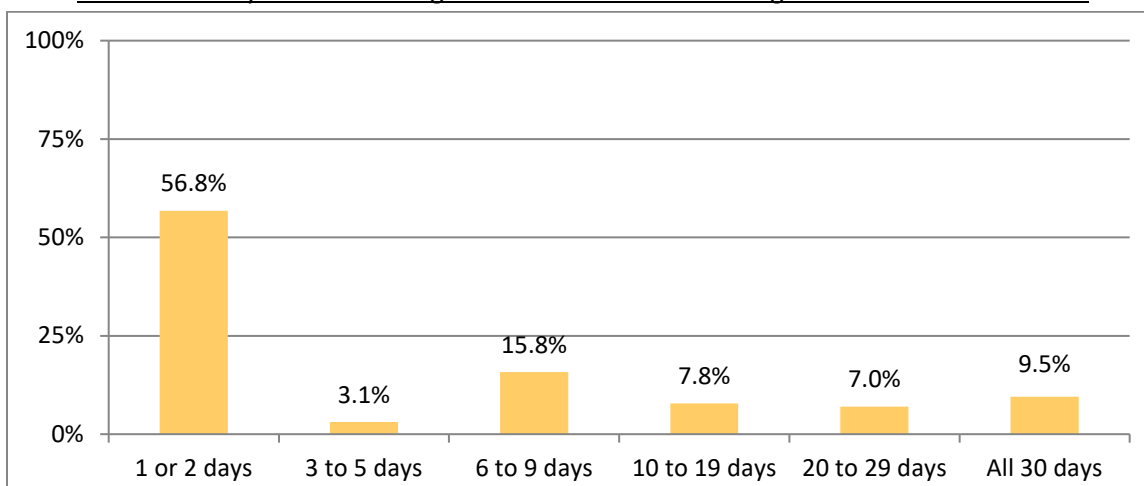


## Substance Use Extent & Circumstances



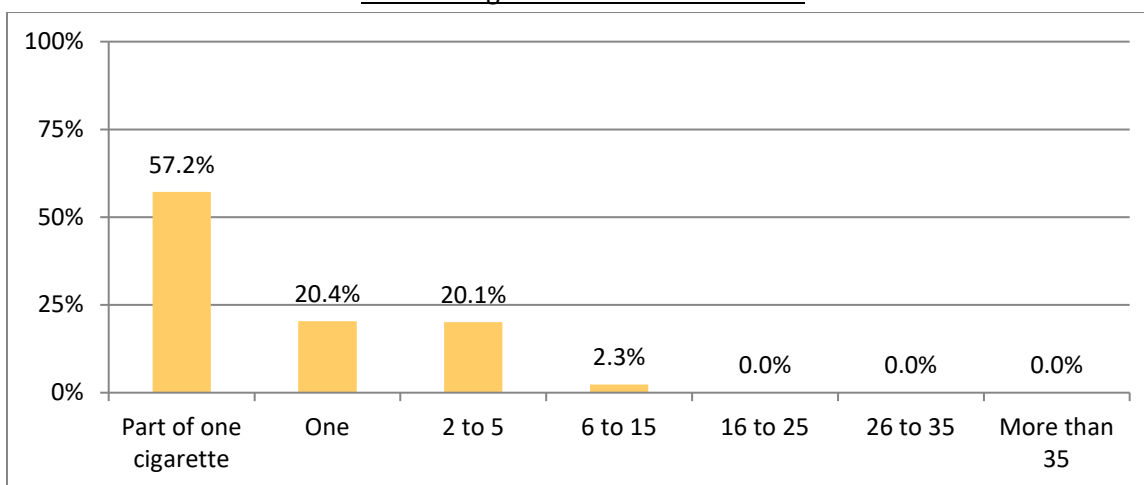
Among students who reported that they smoked standard cigarettes, most (57.1%) smoked only one or two days out of the month, followed by 3 to 5 days (20.1%), and then daily smoking (11.4%). This is a change from previous years in which daily smoking was the second highest category.

Number of Days of Use Among Youth Who Had Smoked Cigarettes in the Past Month



Among youth who smoked a cigarette in the 30 days prior to the survey administration, 61.4% tried to quit smoking at some point in their life; 38.6% did so successfully. The majority (85.7%) of youth who smoked in the past 30 days reported smoking five or fewer cigarettes on the days that they did smoke. Continuing the trend seen in 2022, youth who do smoke are not smoking as many cigarettes with no youth smoking more than 15 per day. The majority of youth were only smoking part of 1 cigarette.

Average Number of Cigarettes Smoked per Day (on Days That Cigarettes Were Smoked) Among Youth Who Had Smoked Cigarettes in the Past Month



Students are primarily taking cigarettes without permission, following by getting it from a friend. All other choices have dropped to 7% or less. As students could select multiple options, the total adds to more than 100%.

How Cigarettes were Accessed, of Those Who Reported Past Month Use

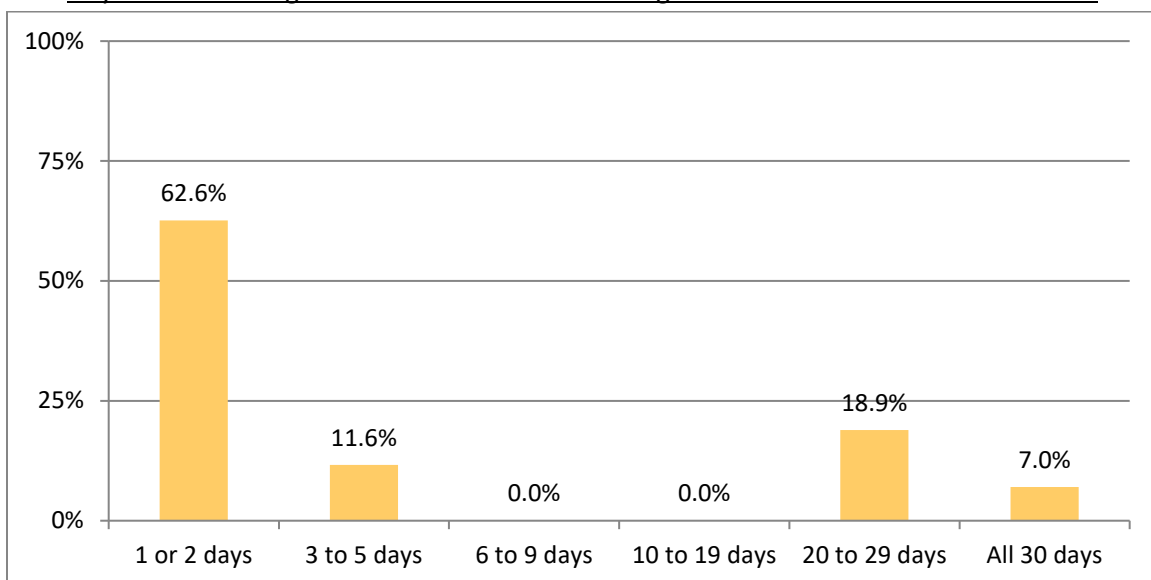
	Endorsed
<i>I take it without permission</i>	49.3
<i>A friend gives or sells it to me</i>	40.9
<i>I ask a stranger to buy them for me</i>	6.6
<i>A family member gives or sells it to me</i>	6.1
<i>I buy them from the store</i>	5.0
<i>I buy it online</i>	5.0
<i>Other</i>	23.8

Almost a third of cigarette smokers (31.2%) had smoked on school property during the past 30 days; Approximately 1.7% of smokers reported smoking on school property all of the past 30 days.



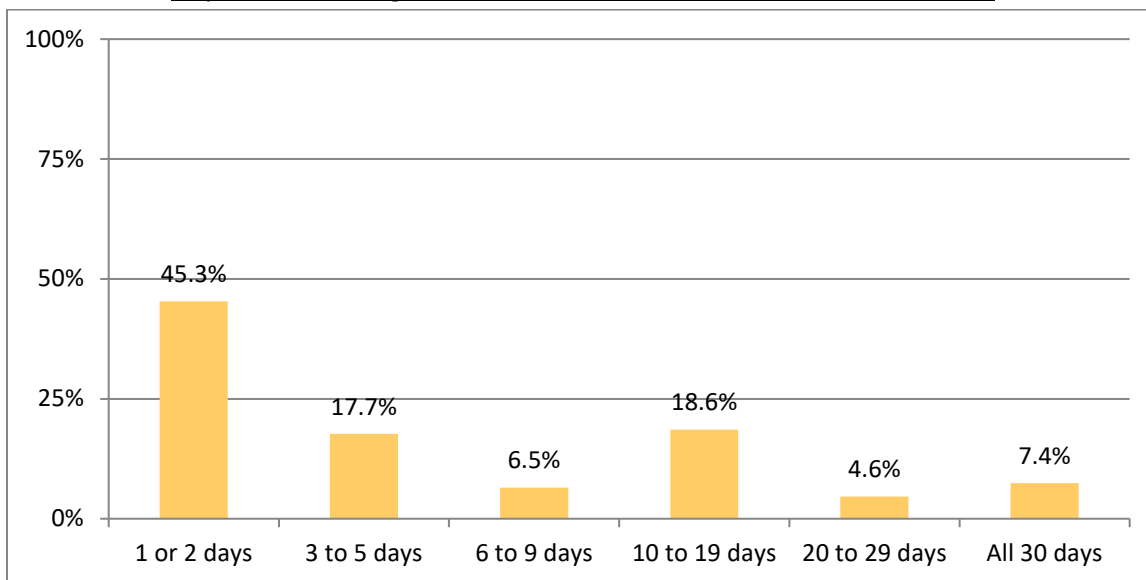
Of those who used of chewing tobacco in the past 30 days, the largest percentage of youth used chewing tobacco 1 or 2 days (62.6%) a month or 20 to 29 days (18.9%). Again, daily dropped quite a bit since 2022, down to 7%.

Days of Use Among Youth Who Had Used Chewing Tobacco or Snuff in the Past Month



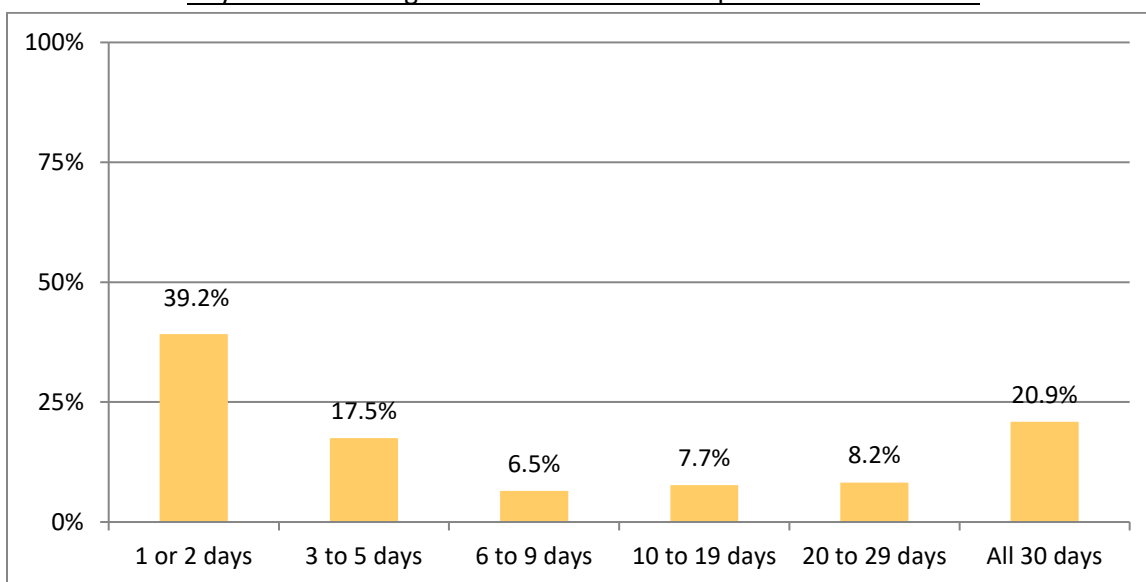
The majority of students who reported using a hookah only did it on an occasional basis. However, about 1 in 15 reported using daily.

Days of Use Among Youth Who Had Used Hookahs in the Past Month



Youth who reported using vapes have a similar use pattern to the previous pattern standard cigarettes. The most students (34.1%) smoked only one or two days out of the month, followed by daily smoking (28.3%).

Days of Use Among Youth Who Had Used Vapes in the Past Month



Most youth who smoked vapes obtained them from a friend, followed by buying purchasing from a store.

How E-Cigarette Products were Accessed, of Those Who Reported Past Month Use<sup>1</sup>

	Endorsed
<i>A friend gives or sells it to me</i>	54.6
<i>I buy them from the store</i>	16.8
<i>I ask a stranger to buy them for me</i>	13.2
<i>A family member gives or sells it to me</i>	12.8
<i>I take it without permission</i>	12.8
<i>I buy it online</i>	7.9
<i>Other</i>	16.9

Vapes use a liquid or dry material to create an aerosol that looks like water vapor, the content of these may vary. The majority of them contain nicotine. Many students reported using nicotine (55.7%) and flavor only products (48.4%) in their vapes at least sometimes. More than four in ten reported at least sometimes using marijuana in their e-cigarette, an increase from 2022.

Product Used in E-Cigarette, Mod, or Vape for Those Who Reported Using E-Cigarette in Their Lifetime

	Endorsed
<i>Nicotine</i>	55.7
<i>Flavor only</i>	48.4
<i>Marijuana</i>	41.5
<i>Other</i>	3.5

Vapes have become the most common way youth ingest nicotine. However, many youth will use more than one method. For those who report using a vape in the past 30 days, 17.5% have also smoked a standard cigarette in the past month, 4.6% have used chewing tobacco and 13.5% have used a hookah.



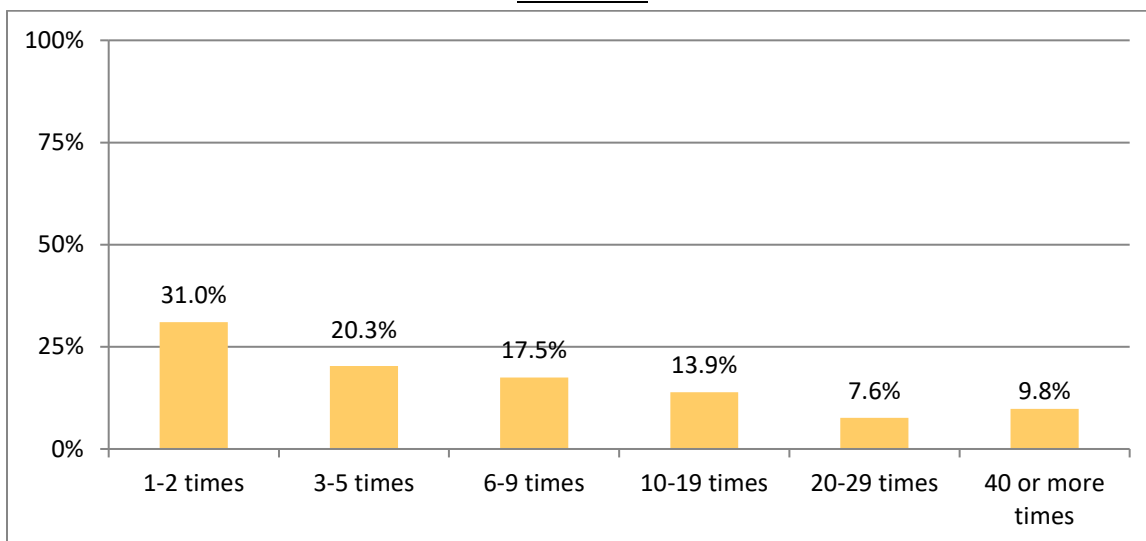
<sup>1</sup> As students could select multiple options, tables on access and subcategories of substances can add to more than 100%.



Of the students who reported having had at least one drink in their lifetime, about one-third (31.0%) only consumed alcohol on 1-2 occasions. While approximately 10% had consumed alcohol 40 or more times, this continues a decrease from 2020. This excludes “when you only had a sip or two from a drink or if you drank alcohol only for religious purposes”.

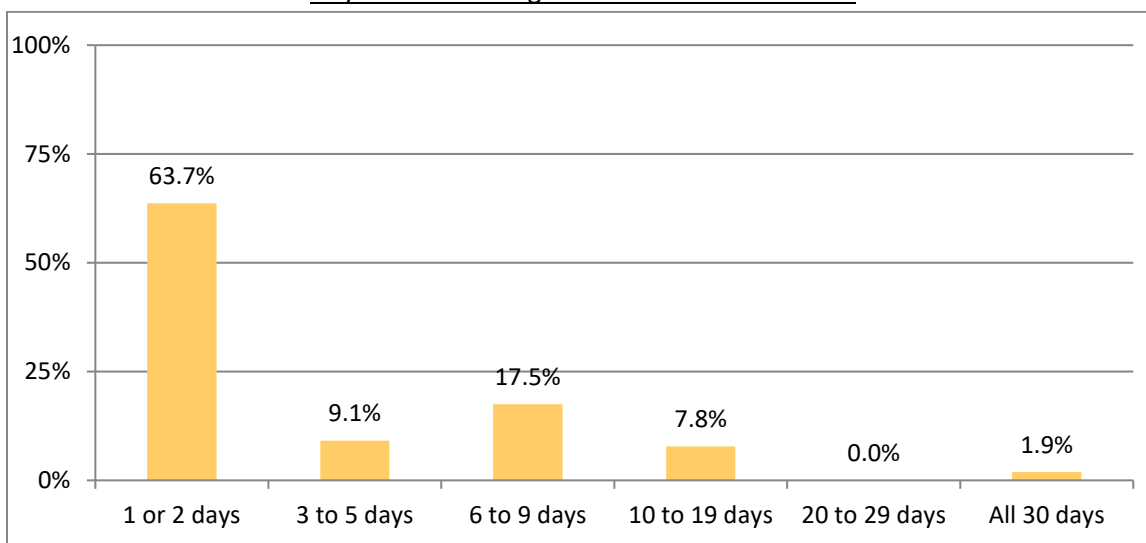
Number of Times Youth Had at Least One Drink of Alcohol in Their Lifetime, Among Those Who Had a Drink at

Least Once



Among those youth who reported drinking in the last 30 days, the majority (63.7%) drank on only 1 or 2 days. Among those youth, 9.4% reported drinking on school property at least once.

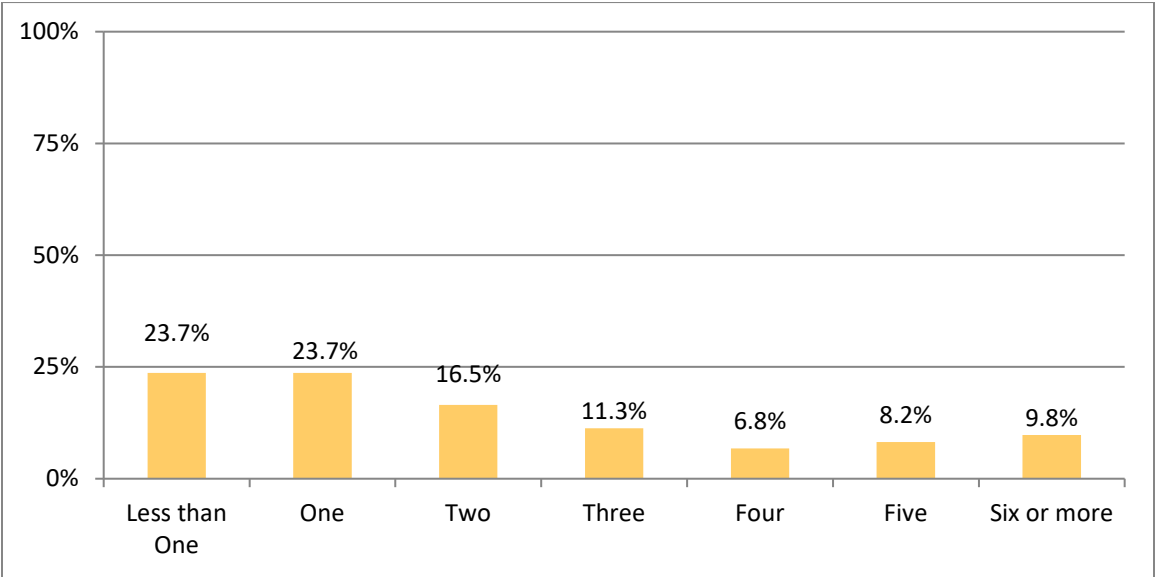
Days of Use Among Past Month Alcohol Users





A third (33.1%) of students who reported past month alcohol use also reported having five or more drinks (binge drinking) in the past month. Taken with the information presented below on the average number of drinks per occasion, this indicates that while most youth only drink one to two days a month, when they do drink many of them drink heavily.

Average Number of Drinks Consumed (on Days That Alcohol Was Used) Among Youth Who Consumed Alcohol in the Past Month



Overall, in the past 30 days, a small percentage (0.4%) of students 16 and older reported drinking while driving, compared to 4.6% at the national level (YRBS, 2021). Over 1 in 10 (13.0%) of all students surveyed reported that they rode in a car with someone who had been drinking, which is similar to the national data (14.1%) (YRBS, 2021<sup>2</sup>). However, for students who reported drinking in the past 30 days, 44.5% rode with someone who had been drinking and 9.6% reported drinking and driving.

While friends remained the primary source to get alcohol, family members, and having taken it without permission were also common sources.

How Alcohol was Accessed, of those who reported Past Month Use

	Endorsed
<i>A friend gives or sells it to me</i>	45.1
<i>I take it without permission</i>	37.9
<i>A family member gives or sells it to me</i>	32.8
<i>I buy them from the store</i>	10.8
<i>I ask a stranger to buy it for me</i>	4.9
<i>I buy it online</i>	0.9
<i>Other</i>	10.8

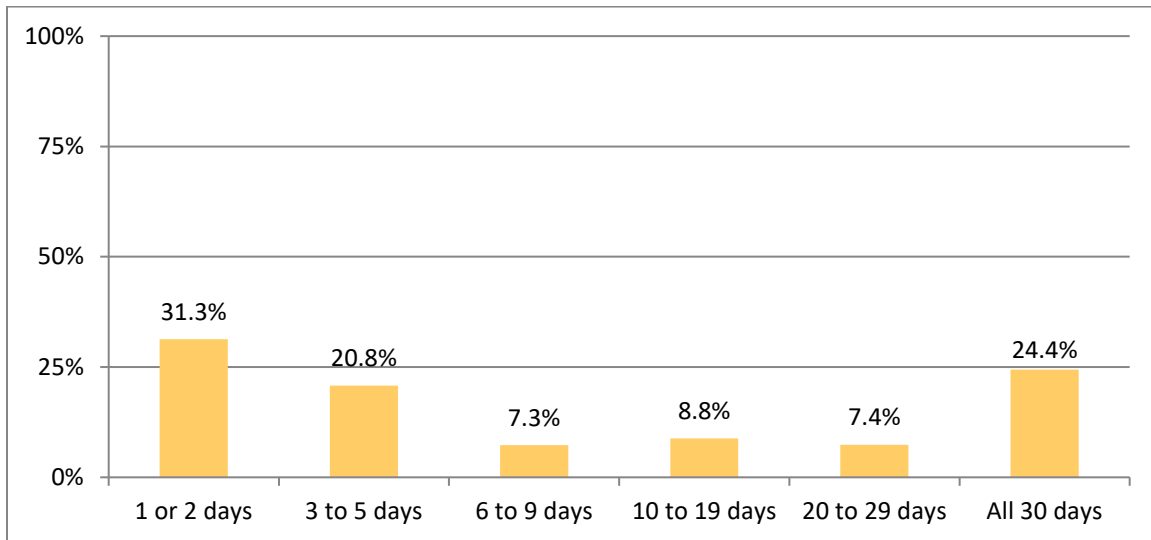
<sup>2</sup> 2021 is the most recent data available for YRBS as of Aug 2024

## Marijuana



Of youth who smoked marijuana in the past month, almost a third (31.3%) youth reported smoking one or two days in the past month, while a fourth (24.4%) reported daily use.

Number of Days of Use Among Past Month Marijuana Smokers



About one third (35.3%) of past month users smoked marijuana had done so while on school property. This is much higher than the percentage who reported drinking alcohol on school property (9.4%) but similar to those who reported smoking cigarettes on school property (31.2%).

Most students reported smoking and/or vaping marijuana, although edibles and dabbing, etc. were also relatively common. Note that categories have changed slightly since 2018 to reflect new ways of using marijuana.

### Methods of Using Marijuana

	Endorsed
<i>Smoke it (blunt, pipe, hookah, etc.)</i>	76.0
<i>Eat it (edibles)</i>	65.3
<i>Vape it (dry plant, THC oil, extracts, etc.)</i>	63.1
<i>Dabbing / Wax / Hash Oil</i>	29.9
<i>Other</i>	4.8

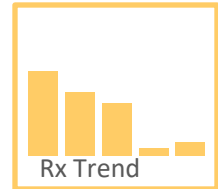
The majority of students got their marijuana from a friend. They also obtained it from a dealer and family members.

How Marijuana was Accessed, of Those Who Reported Past Month Use

	Endorsed
<i>A friend gives or sells it to me</i>	52.8
<i>A family member gives or sells it to me</i>	28.6
<i>I buy it from a dealer</i>	24.8
<i>I take it without permission</i>	18.5
<i>A stranger gives or sells it to me</i>	5.2
<i>I buy it online</i>	9.0
<i>Other</i>	14.4

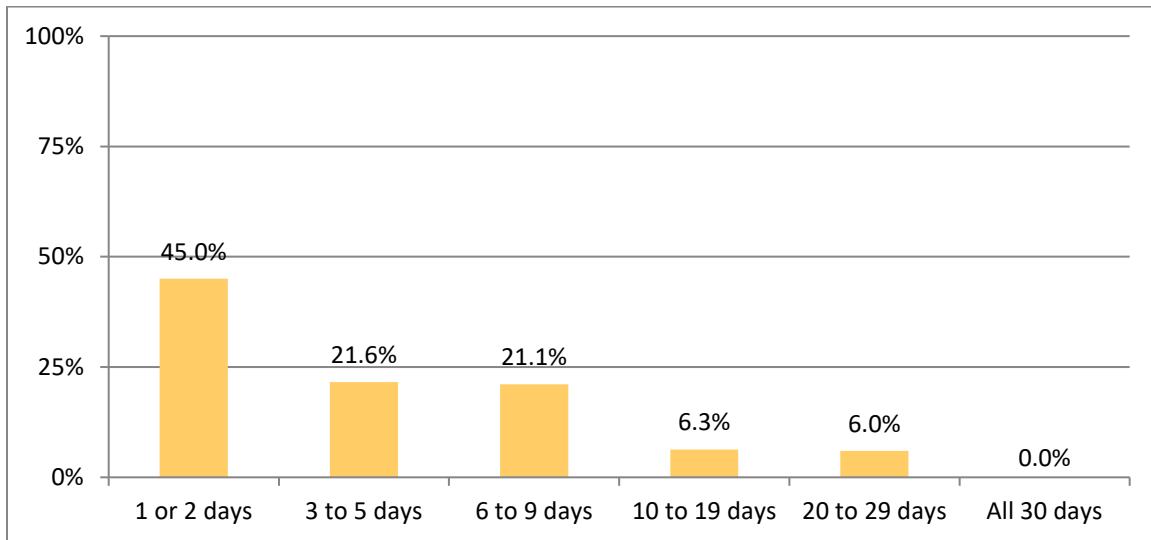


## Prescription Drug Misuse



Of youth who misused prescription drugs in the past month, the majority reported only using one to two days, while no one reported daily use.

Number of Days of Use, of Those Who Reported Past Month Use



Prescription drugs were the only substance that students reported getting primarily from their family; all other substances were primarily obtained from a friend. The number of those youth who were getting it from a family member (43.1% in 2018 and 28.6% in 2020) and taking it without permission (10.2% in 2018 and 5.6% in 2020) has decreased, which may indicate that prescription drug disposal methods may be helping decrease the availability of prescription drugs. This should be interpreted cautiously because there are only two data points.

How Prescription was Accessed, of Those Who Reported Past Month Use

	Endorsed
<i>A family member gives or sells it to me</i>	51.0
<i>A friend gives or sells it to me</i>	32.4
<i>I take it without permission</i>	29.6
<i>A stranger gives or sells it to me</i>	14.0
<i>I buy it online</i>	1.1
<i>Other</i>	5.6

Among youth who misused prescription drugs at least once (14.7%), pain medication was the most commonly misused substance; followed by sedatives and sleeping medication. While only a single data point, this is quite a jump for sedatives and should be monitored as the related “to help me feel better or happier” also moved much higher in the reasons why students misuse prescription drugs.

Type of Prescription Misused in the Past Year, of Those Who Reported Lifetime Misuse of Prescription Drugs

	<b>Endorsed</b>
<i>Pain medication</i>	45.4
<i>Sedatives / anxiety medication</i>	35.4
<i>Sleeping medication</i>	29.4
<i>Stimulants</i>	18.7
<i>Other</i>	7.4

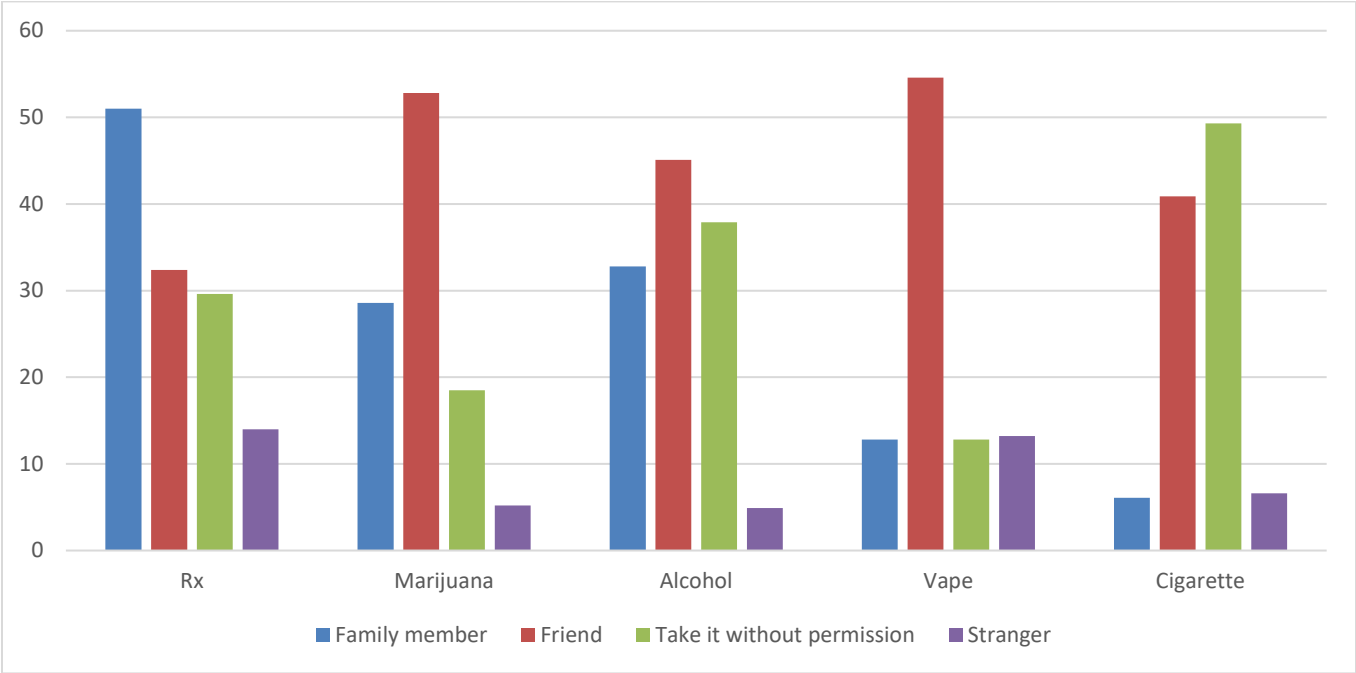
Reasons for Use that were Important to Those Who Reported Lifetime Misuse of Prescription Drugs

	<b>Endorsed</b>
<i>To help me sleep</i>	30.9
<i>To help me feel better or happier</i>	30.7
<i>To reduce and/or manage pain</i>	27.5
<i>To help with stress</i>	24.6
<i>To help with emotional pain</i>	20.1
<i>To increase my energy</i>	14.8
<i>To have a good time</i>	13.0
<i>Curiosity</i>	10.5
<i>To help with weight loss</i>	8.6
<i>To improve academic performance</i>	7.2
<i>To fit in with friends</i>	4.8

Looking across substances, friends are overwhelmingly the way students access most of their substances. The exception is prescription drugs which are accessed through family members. Of note, taking it without permission is also high, topping even friends for cigarettes.

The table below captures the top 4 methods for each, with the exception of obtaining marijuana from a dealer (24.8%), vapes from a store (16.8%) and alcohol from a store (10.8%).






Methods of Access, for those who report use of each substance



## Factors Associated with Adolescent Substance Use

### Substance Availability

About half of youth perceived vapes, alcohol, and over-the-counter drugs as either “very easy” or “sort of easy” to obtain. Marijuana was considered easier to get than prescription or synthetic drugs, with almost one third of students believing marijuana was easy to get. Illegal drugs were perceived as the most difficult to get, with a large majority (91.5%) reporting that they were “sort of hard” or “very hard” to get.




Youth Perception of Substance Availability				
	Very Easy	Sort of Easy	Sort of Hard	Very Hard
Over-the-Counter Drugs	24.4	19.2	14.6	41.8
Vapes 	22.1	18.8	18.2	40.8
Alcohol 	19.1	20.8	19.7	40.4
Cigarettes 	13.2	17.1	21.9	47.8
Marijuana 	18.2	12.3	14.3	55.1
Synthetic Drugs	9.1	11.9	17.0	62.0
Prescription Drugs 	6.8	10.1	20.6	62.5
Other Illegal Drugs	3.9	4.6	13.8	77.7

### Law Enforcement

The perceived effectiveness of law enforcement around substance use was low. Most youth did not believe that the police would catch someone using cigarettes or alcohol in their neighborhood. This was fairly consistent across all drugs.

Note the question was worded “Select No! if you really don’t agree with the sentence, no if you sort of disagree, yes if you sort of agree, and Yes! if you really agree with the sentence.”






Percentage of Youth Who Think the Police Would Catch Students Using Substances in Their Neighborhood

	No!	no	yes	Yes!
Cigarettes 	25.5	42.1	24.6	7.7
Alcohol 	24.9	42.9	23.5	8.7
Marijuana 	24.2	35.3	27.5	13.0

## Peer Substance Use and Perception of Substance Use






The majority of youth surveyed reported that none of their friends used alcohol, cigarettes, marijuana, or other illegal drugs in the past year. Many youth (35.0%), however, did have at least one friend who used vapes while about one in three (30.5%) had at least one friend who drank alcohol.

Percentage of Youth Who Have Friends Who Use Substances

	0 friends	1 friend	2 friends	3 friends	4 or more friends
Vapes 	65.0	10.6	7.4	3.6	13.4
Alcohol 	69.5	10.4	6.2	3.5	10.4
Used Marijuana 	74.4	6.7	4.8	3.4	10.7
Cigarettes 	87.4	5.7	2.9	1.4	2.6
Prescription Drugs 	91.7	4.1	1.9	0.8	1.4
Other Illegal Drugs	94.6	2.7	1.1	0.8	0.8

The majority of students felt like their friends would consider all types of substance use wrong. While vapes was the least likely for students to be concerned about peer judgment, 3 out of 4 still thought their friends would disapprove.





Youths' Perception of How Wrong their Friends consider Substance Use

	Not wrong at all	A little bit wrong	Wrong	Very wrong
Prescription Drugs 	5.3	4.7	17.1	72.9
Smoke Cigarettes 	7.3	7.9	21.0	63.8
Used Vapes 	12.4	12.1	19.7	55.9
One or two drinks every day 	7.8	8.4	24.3	59.5
Use Marijuana 	13.4	9.4	16.0	61.1



Similarly, while students may have friends who used substances, the great majority of them believed that their friends would not see them as “very cool” or “pretty cool” if they used. Standard cigarettes were seen as the least cool substance.








Percentage of Youth who Indicate Level of Coolness

	Very Cool	Pretty Cool	A Little Cool	Not at all Cool
Smoked Cigarettes 	2.2	5.4	15.5	76.9
Used Vapes 	5.3	10.2	19.9	64.6
Used Marijuana 	7.4	9.9	15.3	67.4
Drank Alcohol 	5.6	9.6	21.5	63.4

## Perceived Risk of Harm from Substances

Alcohol usage (without a specified dosage) and marijuana were seen as the least risky substances. As alcohol dosage was specified, however, it was seen as more risky. Cigarettes, prescription drug misuse, and other illegal drug use was perceived as the most risky.









Youths’ Perception of Risk of Harm from Using Substances

	No Risk at All	Slight Risk	Moderate Risk	Great Risk
Any alcohol use 	7.2	30.1	35.3	27.4
Marijuana once or twice a week 	12.2	20.0	22.9	45.0
Vapes 	7.9	19.9	30.9	41.3
One or two drinks nearly every day 	7.3	17.5	33.7	41.5
Five or more drinks once or twice a week 	6.7	11.7	24.8	56.7
Over the Counter Drugs	7.0	15.4	28.0	49.6
Cigarettes, 1+ packs per day 	6.4	11.4	22.0	60.2
Synthetic Drugs	7.0	11.1	20.5	61.4
Prescription Drugs 	5.7	8.7	21.3	64.2
Other Illegal Drugs	5.5	6.1	15.7	72.7

## Morality of Substance Use

Similar to responses for the perception of harm, alcohol use was most accepted substance. However, it should be noted that the majority of students in every question said that it would be “very wrong” to use substances. When combined with “wrong”, 7 out of 10 students or more disagreed with substance use in all categories except alcohol. Almost all disagreed with the misuse of prescription drugs and use of other illegal drugs. For both alcohol and marijuana, as the frequency of use increased, so did how wrong it was perceived.

Youths’ Perception of Wrongfulness of Substance Use

	Not wrong at all	A little bit wrong	Wrong	Very wrong
Any type of alcohol 	4.9	13.9	21.2	60.0
Any use of marijuana 	6.0	10.1	14.0	69.9
Vapes 	3.6	9.8	18.2	68.4
Once or twice a week, use marijuana 	5.5	7.9	14.2	72.3
Five or more drinks once or twice a week 	2.9	3.6	13.6	79.9
One or two drinks every day 	2.8	4.8	17.3	75.0
Cigarettes 	2.3	5.5	18.3	73.8
Over the Counter Drugs	2.5	4.6	13.2	79.7
Prescription Drugs 	1.6	2.8	12.1	83.5
Other Illegal Drugs	1.0	2.1	9.5	87.4

Trends over time with the Risk and Protective factors are being analyzed. The report will be available at <https://dmh.mo.gov/alcohol-drug/missouri-behavioral-health-epidemiology-workgroup> in Winter 2024.

# CHAPTER 3 – PROBLEM BEHAVIORS

This chapter contains information on self-reported problem behaviors, including emotional and physical bullying, physical aggression, and experience with weapons. It also includes information on factors associated with adolescent problem behaviors, such as rebellious and defiant attitudes, weapon availability, perceived law enforcement response to weapon possession, peer weapon use, and problem behavior and attitudes among the family.

## **Bullying**

### **Bullying Behaviors**

Youth were asked to report the number of times in the past three months they bullied others or were bullied by another student. Bullying behaviors include physical bullying (whether a student had hit, shoved or pushed another student and were not “just fooling around”) and emotional bullying (spreading mean rumors or lies, making fun of others, and embarrassing or hurting another student through the use of a cell phone or the internet).

The majority of students reported that they had not engaged in physical bullying (86.6%), spread mean rumors or lies at school (81.9%), or embarrassed another student online or via text messaging (83.0%). However, approximately half (54.8%) of the youth did report making fun of other people and 4.8% reported doing this 40 or more times in the past three months.

Frequency of Bullying Behaviors in the Past 3 Months

	Never	1-2	3-5	6-9	10-19	20-29	30-39	40 +
<i>Hit, shoved or pushed another student and were not just fooling around</i>	86.6	8.2	2.5	0.8	0.6	0.2	0.2	0.9
<i>Spread mean rumors or lies about others at school</i>	81.9	12.0	3.6	0.9	0.7	0.1	0.1	0.6
<i>Made fun of other people</i>	54.8	23.5	8.6	3.8	2.7	1.1	0.7	4.8
<i>Posted something online or sent a text that might embarrass or hurt another student</i>	83.0	11.0	3.0	1.1	0.6	0.3	0.0	0.9

## Peer Victimization

Students were asked if they were bullied on school property in the past year. Bullying was defined as “when one or more students tease, threaten, spread rumors about, hit, shove, or hurt another student over and over again. It is not bullying when two students of about the same strength or power argue, fight, or tease each other in a friendly way”.

Frequency of Peer Victimization in the Past 3 Months

	Never	1-2	3-5	6-9	10-19	20-29	30-39	40 +
<i>Been hit, shoved or pushed by another student who was not just fooling around</i>	76.6	14.6	3.8	1.9	1.2	0.4	0.2	1.3
<i>Mean rumors or lies spread about you at school</i>	57.9	22.4	9.9	3.7	2.7	1.0	0.5	2.1
<i>Made fun of you</i>	44.0	24.7	11.5	6.3	4.8	1.9	1.0	5.7
<i>Had something embarrassing or hurtful posted online or in a text by another student</i>	74.7	13.9	5.3	2.5	2.0	0.2	0.2	1.2

## Physical Aggression & Experience with Weapons

More than four out of five students reported not engaging in a physical fight in the last year. Almost all youth reported they were not injured in a physical fight or threatened with a weapon while on school property. For those who did engage in fighting, the majority reported that they only fought once in the past year.

Frequency of Fighting and Being Threatened/Injured with a Weapon in the Past 12 months

	0 times	1 times	2 or 3 times	4 or 5 times	6 or 7 times	8 or 9 times	10 or 11 times	12 or more
<i>In a physical fight</i>	85.0	8.6	3.9	1.4	0.5	0.1	0.1	0.6
<i>Injured in a physical fight (required medical treatment)</i>	97.8	1.7	0.3	0.0	0.0	0.0	0.0	0.1
<i>Threatened/Injured with a weapon on school property</i>	91.1	4.9	2.6	0.6	0.3	0.1	0.0	0.4

## Rebellious & Defiant Attitudes

The large majority of youth did not report rebellious and defiant attitudes. Of the rebellious behaviors, cheating was seen as the most acceptable, with over one out of four students that “agreed” or “strongly agreed” with that statement.

### Extent of Rebellious and Defiant Attitudes

	<b>Strongly disagree</b>	<b>Disagree</b>	<b>Agree</b>	<b>Strongly Agree</b>
<i>I ignore rules that get in my way.</i>	37.5	45.3	15.0	2.2
<i>I do the opposite of what people tell me, just to get them mad.</i>	48.5	37.1	12.3	2.1
<i>I think sometimes it is okay to cheat at school.</i>	38.5	33.9	23.0	4.6

## Weapons - Availability, Law Enforcement, and Peer Behavior

More than half (60.4%) of all youth did not believe that a youth carrying a gun in their neighborhood would be caught by the police.

### Extent to Which Youth Think the Police Would Catch a Kid Carrying a Gun in Their Neighborhood

	<b>No!</b>	<b>no</b>	<b>yes</b>	<b>Yes!</b>
<i>If a kid was found carrying a gun in your neighborhood, or in the area around where you live, would he or she be caught by police?</i>	15.4	24.2	33.8	26.6

While the vast majority of youth did not have a friend who carried a gun (not including use for hunting or sport), 10% reported at least one friend had carried a gun in the past year.

### Number of Friends Who Carried a Gun in the Past Year (12 months)

	<b>0 friends</b>	<b>1 friend</b>	<b>2 friends</b>	<b>3 friends</b>	<b>4 or more friends</b>
<i>How many friends you feel closest to have carried a gun (not including use of a gun for hunting or sport)?</i>	90.0	4.9	2.1	1.0	2.0

# CHAPTER 4 – MENTAL HEALTH



## Depression

Youth were asked six questions related to depression. Most students (72.3%) reported feeling grouchy or in a bad mood at least “sometimes”. Over half reported feeling sad (55.8%), changes in sleep (59.2%), or difficulty concentrating in school (61.9%) at least “sometimes”. Feeling hopeless was reported the least (34.7% “sometimes”, “often” or “always”). This pattern has remained consistent over time.

Extent of Depressive Symptoms in the Past Month (30 Days)

	Not very				
	Never	often	Sometimes	Often	Always
<i>Were you very sad?</i>	19.5	24.1	29.0	21.3	6.1
<i>Were you grouchy or irritable, or in a bad mood?</i>	9.8	17.8	36.8	27.8	7.9
<i>Did you feel hopeless about the future?</i>	38.2	25.5	19.7	10.0	6.6
<i>Did you feel like not eating or eating more than usual?</i>	33.8	17.7	20.4	16.7	11.4
<i>Did you sleep a lot more or a lot less than usual?</i>	22.0	18.6	25.7	21.0	12.8
<i>Did you have difficulty concentrating on your school work?</i>	17.4	19.0	25.8	20.2	17.5

Females consistently reported a difference in experiencing more depressive symptoms than males.

Depressive Symptoms in the Past Month (30 Days) by Gender (Often & Always)

	Male	Female
<i>Were you sad?</i>	14.7	35.1
<i>Were you grouchy or irritable, or in a bad mood?</i>	24.8	44.2
<i>Did you feel hopeless about the future?</i>	12.6	19.6
<i>Did you feel like not eating or eating more than usual?</i>	19.5	35.0
<i>Did you sleep a lot more or a lot less than usual?</i>	24.0	41.1
<i>Did you have difficulty focusing on your school work?</i>	30.5	43.2

## Self-Harm, Suicidal Ideation & Attempts

About 21.5% of students reported attempting to harm themselves in a deliberate, but not suicidal, way. The most common method of self-harm was “cut, scratched, or hit myself on purpose”. Females were much more likely than males to report self-harm.

Percent of Students Reporting Types of Self-Harm

	Male	Female	Overall
<i>Cut, scratched or hit myself on purpose to hurt myself</i>	9.4	21.9	16.5
<i>Punched a hard object (like a wall or door)</i>	10.0	13.8	12.3
<i>Pulled my hair or eyelashes</i>	3.2	11.5	8.0
<i>Burned myself</i>	1.6	6.2	4.2
<i>Swallowed more medicine than a doctor told me to take to hurt myself</i>	0.9	4.6	3.0
<i>Used drugs or alcohol to hurt myself</i>	0.8	3.1	2.3
<i>Swallowed something on purpose that was not food, drink or medicine in order to hurt myself</i>	0.6	1.1	0.9
<i>Other</i>	2.3	3.0	2.7

More than 1 in 10 youth (11.2%) surveyed reported that they considered suicide in the last year and 7.8% made a plan to attempt suicide.

Of those who attempted suicide, 18.5% had attempts that resulted in injury. The majority of those who attempted did so only once (53.2%).

Number of Suicide Attempts in the Past Year (12 Months)

	0 times	1 time	2 or 3 times	4 or 5 times	6 or more times
<i>How many times did you actually attempt suicide?</i>	94.5	2.9	1.8	0.4	0.4

The YRBS (2021<sup>3</sup>) was the national comparison for high school students only and Missouri numbers were lower than the national numbers across all questions.

Percent of Students Reporting Suicidal Behavior – High School ONLY

	2024 MSS	2021 YRBS
<i>Seriously Considered</i>	11.7	22
<i>Made a Plan</i>	8.4	18
<i>Attempted</i>	5.2	10
<i>Attempted Resulting in Injury</i>	1.4	3

**Resiliency**

The majority of students “agreed” or “strongly agreed” with the questions about knowing where to get help, feeling optimistic, and handling stress well. However, almost half didn’t feel like they had healthy coping mechanisms.

Resiliency Factors

	Strongly disagree	Disagree	Agree	Strongly Agree
<i>I know where to go in my community to get help.</i>	12.0	19.9	50.4	17.8
<i>I feel optimistic about my future.</i>	10.9	18.5	45.5	25.0
<i>I feel that I handle stress in a healthy way.</i>	19.0	27.4	40.8	12.7

<sup>3</sup> 2021 is the most recent data available for YRBS as of Aug 2024



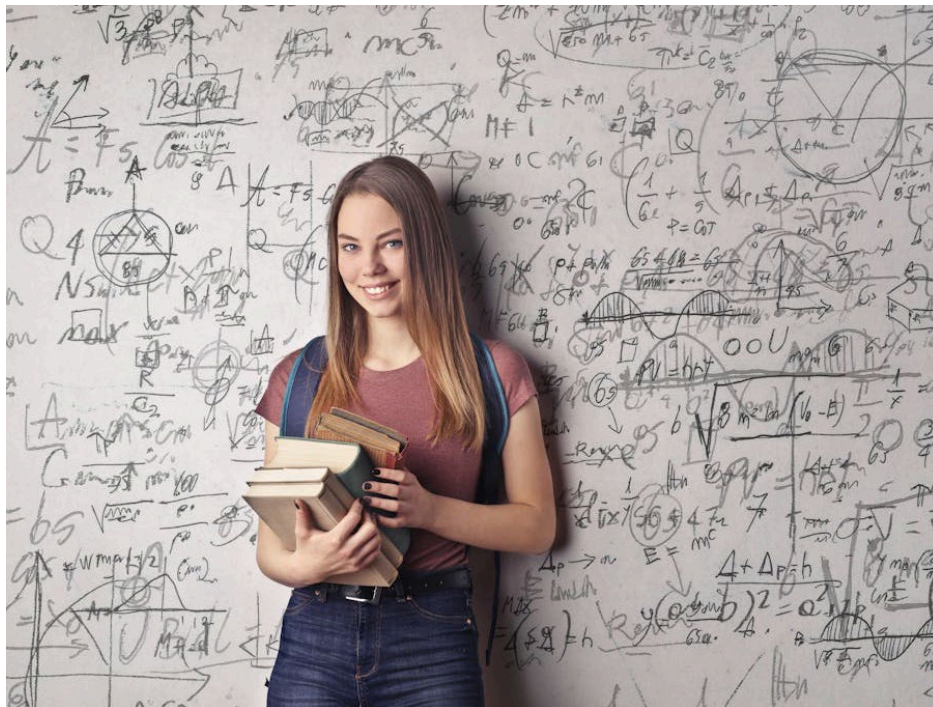
# CHAPTER 5- EDUCATIONAL ENVIRONMENT

## Perceptions & Attitudes toward School

The majority of youth agreed that students of all races and ethnicities were treated fairly, that rules were enforced fairly, and that teachers noticed when the student was doing a good job. However, only four in ten students say the school notified the student's family when they are doing a good job.

Perceptions and Attitudes Toward School by Youth

	Strongly disagree	Disagree	Agree	Strongly Agree
<i>My teacher(s) notice(s) when I am doing a good job and let me know about it.</i>	4.7	20.7	60.9	13.7
<i>The school lets my parents know when I have done something well.</i>	16.7	42.9	33.9	6.6
<i>In my school, rules are enforced fairly.</i>	8.1	25.3	55.9	10.8
<i>In my school, students of all races and ethnic groups are treated equally.</i>	4.3	11.6	51.4	32.6



## School Performance

Almost all youth surveyed reported they were making at least passing grades, with almost half reporting having received mostly A's.

### Average Grades Last School Year

	<b>Mostly F's</b>	<b>Mostly D's</b>	<b>Mostly C's</b>	<b>Mostly B's</b>	<b>Mostly A's</b>
<i>What were your average grades?</i>	0.6	4.6	16.5	34.0	44.7

Only 7.5% of students reported being suspended from school in the past 3 months.

### Number of Times Youth were Suspended from School in the Past Three Months

	<b>Never</b>	<b>1-2</b>	<b>3-5</b>	<b>6-9</b>	<b>10-19</b>	<b>20-29</b>	<b>30-39</b>	<b>40 +</b>
<i>Been suspended from school</i>	92.5	6.2	0.7	0.4	0.1	0.0	0.0	0.2

Approximately half of the of students reported skipping at least one day of school in the past month. Of those students, the majority reported skipping only one or two days.

### Number of Days Youth Skipped or Cut School in the Past Month

	<b>0 days</b>	<b>1 or 2 days</b>	<b>3 to 5 days</b>	<b>6 to 9 days</b>	<b>10 + days</b>
<i>How many whole days have you missed school because you skipped or cut?</i>	55.8	25.6	12.0	3.7	2.8

The majority of students did not report missing school due to feeling unsafe. However, Missouri is reporting higher rates than the national survey (High school students only: 11.5% MSS, 2024 compared to 9%, YRBS, 2021<sup>4</sup>). However, 18.1% of all students “disagreed” or “strongly disagreed” that they felt safe at school.

### Number of Days Youth Skipped Due to Feeling Unsafe in the Past Month

	<b>0 days</b>	<b>1 day</b>	<b>2 to 3 days</b>	<b>4 to 5 days</b>	<b>6+ days</b>
<i>How many whole days have you missed school because you felt you would be unsafe at school or on your way to or from school?</i>	89.2	5.6	3.3	0.9	1.0

### Perceptions of School Safety in the Past Three Months

	<b>Strongly disagree</b>	<b>Disagree</b>	<b>Agree</b>	<b>Strongly Agree</b>
<i>I feel safe at school</i>	3.2	14.9	65.7	16.2

<sup>4</sup> 2021 is the most recent data available for YRBS as of Aug 2024

# Appendix A – Survey Wording 2024

Comparison tables from 2006 to 2024 and copies of the surveys are available at <https://dmh.mo.gov/alcohol-drug/missouri-behavioral-health-epidemiology-workgroup>